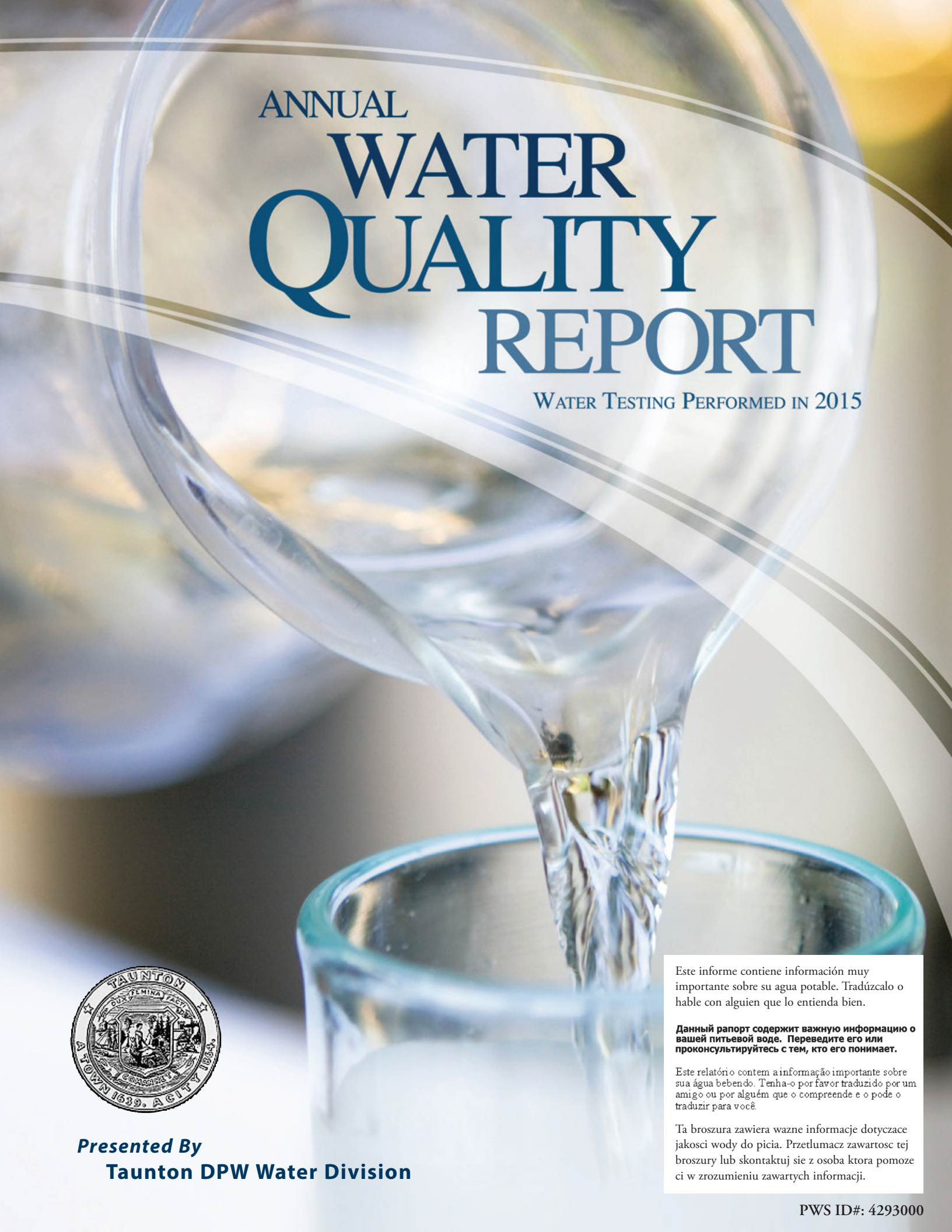
ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2015



Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Данный рапорт содержит важную информацию о вашей питьевой воде. Переведите его или проконсультируйтесь с тем, кто его понимает.

Este relatório contem a informação importante sobre sua água bebendo. Tenha-o por favor traduzido por um amigo ou por alguém que o compreende e o pode o traduzir para você.

Ta broszura zawiera wazne informacje dotyczace jakosci wody do picia. Przetlumacz zawartosc tej broszury lub skontaktuj sie z osoba ktora pomoze ci w zrozumieniu zawartych informacji.

Presented By

Taunton DPW Water Division

PWS ID#: 4293000

Meeting the Challenge

Once again we are proud to present our annual drinking water report, covering all drinking water testing performed between January 1 and December 31, 2015. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to your homes and businesses. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

Please remember that we are always available to assist you, should you ever have any questions or concerns about your water.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/hotline.

Community Participation

To voice your concerns about your drinking water, please send a letter to the DPW Water Division Superintendent, Jon R. Chase, DPW, 90 Ingell St., Taunton, MA 02780, in care of the Water Division Office.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the Department of Environmental Protection (DEP) and the U.S. Environmental Protection Agency (U.S. EPA) prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and which may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

The Benefits of Fluoridation

Fluoride is a naturally occurring element in many water supplies in trace amounts. In our system, the fluoride level is adjusted to an optimal level averaging one part per million (ppm) to improve oral health in children. At this level, it is safe, odorless, colorless, and tasteless. Our water system has been providing this treatment since 1980. There are over 3.9 million people in 140 Massachusetts water systems and 184 million people in the United States who receive the health and economic benefits of fluoridation.

How Long Can I Store Drinking Water?

The disinfectant in drinking water will eventually dissipate even in a closed container. If that container housed bacteria prior to filling up with the tap water the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/lead.

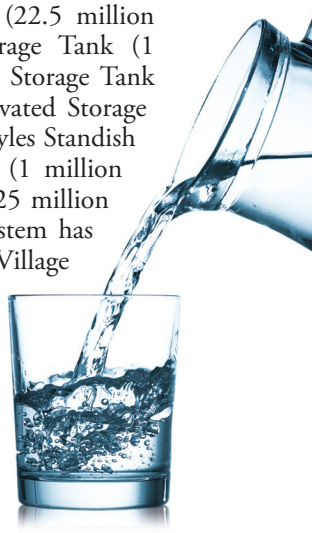
Information on the Internet

The U.S. EPA (www.epa.gov/Your-Drinking-Water) and the Centers for Disease Control and Prevention (www.cdc.gov) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation and public health. Also, the DEP has a Web site (www.mass.gov/eea/agencies/massdep/water/drinking) that provides complete and current information on water issues in Massachusetts, including valuable information about our watershed.

Where Does My Water Come From?

The drinking water supplied by our system comes from six surface water sources and two wells. The surface water sources are: Assawompset, Pocksha, Great Quittacus, Little Quittacus, Long (these five hydrologically interconnected ponds are collectively known as the Assawompset Pond Complex), and Elders Pond. All six reservoirs are located in parts of Freetown, Lakeville, Middleborough, and Rochester, Massachusetts. Raw water from these ponds is treated at the Charles J. Rocheleau Water Filtration Plant located in Lakeville. The two gravel packed wells are located on the campus of the Paul A. Dever State School and the water pumped from the wells is treated at the Myles Standish Industrial Park Storage Tank.

The treated water is then pumped to the distribution system, where it is either delivered to your home or business or sent to one of five storage facilities around the city. The Prospect Hill Reservoir (22.5 million gallons), East Taunton Elevated Storage Tank (1 million gallons) the Westville Elevated Storage Tank (0.3 million gallons), the Oakland Elevated Storage Tank (0.75 million gallons), and the Myles Standish Industrial Park Elevated Storage Tank (1 million gallons) combined provide more than 25 million gallons of distribution storage. Our system has two interconnections to supply both the Village of North Dighton Water District and the Commonwealth of Massachusetts Bridgewater Correctional Complex with potable water. Our system also has potable water services in parts of Berkley, Lakeville, Middleboro, Norton, and Raynham.



QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please contact Matt Vezina, Water Treatment Facility Chief Operator, at (508) 947-0690, ext. 111. You can also visit our Web site at http://www.taunton-ma.gov/dpw-water-division.

How Is My Water Treated and Purified?

The surface water treatment process consists of a series of steps. First, water is drawn from Elders Pond, the terminal reservoir of the water supply system. Caustic soda is added as a pretreatment to help increase the alkalinity. An oxidant is added when needed to help remove naturally occurring manganese from the water. Then carbon dioxide gas is added to increase the alkalinity of the water for improved coagulation of sediment. Then, a coagulant (polyaluminum hydroxychloride) is added to cause small particles to clump together (called floc), making them heavy enough to settle into a basin from which the accumulated sediment is removed. The water is then filtered through four 39-inch-deep, anthracite coal-and-sand filter beds to remove any remaining particles. As these smaller suspended particles are removed, the turbidity of the water is greatly reduced and clear water is produced. The water exiting the filters is then run through an ultraviolet light system to help reduce the amount of chemical disinfectant required. Next, chloramines are added for disinfection to prevent waterborne diseases and to provide a disinfectant residual as the water travels from the treatment plant through the distribution system and to your home or business. Before leaving the treatment plant, caustic soda (to adjust final pH for corrosion control) and fluoride (to prevent tooth decay) are also added.

The ground water treatment process is similar from surface water treatment process; however, the water from the Dever Wells does not require filtration. The treatment process consists of adding and mixing certain chemicals (caustic soda to adjust the pH, chloramines for disinfection, and fluoride to prevent tooth decay) to the water pumped from the Dever Wells before it enters the distribution system.

What's a Cross-connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems) or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand) causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed all industrial, commercial, and institutional facilities in the service area to make sure that all potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test each backflow preventer to make sure that it is providing maximum protection.

For more information on backflow prevention, call the Safe Drinking Water Hotline at (800) 426-4791.

Source Water Assessment and Protection Program

In September 2002, the Massachusetts Department of Environmental Protection (MADEP) completed a Source Water Assessment and Protection Program Report (SWAP) for the City of Taunton's public water system. The Source Water Assessment and Protection Program, established under the federal Safe Drinking Water Act, requires every state to (1) inventory land uses within the recharge areas of all public water supply sources, (2) assess the susceptibility of drinking water sources to contamination from these land uses, and (3) publicize the results to provide support for improved protection.

The Taunton Water System was assigned a susceptibility ranking of high based on the MADEP assessment of potential pollution sources in our watershed. These threats include a variety of land uses, such as cranberry bogs, horse farms, transportation corridors (local roads and highways), and septic systems/cesspools. The SWAP report is available at the Taunton DPW Water Division, City Hall, 15 Summer Street, Taunton, MA 02780, and online at http://www.mass.gov/eea/agencies/massdep/water/drinking/overview-of-the-source-water-assessment-and-protection-pr.html.

In light of our system's ranking, we currently participate in several programs to protect our water supply. We are voting members of the APC Management Committee, a group of the abutting communities and state officials who meet quarterly to manage and protect the Assawompset Pond Complex. We also actively review and comment on all permitted activities within 400 feet of any of our source waters. We regularly patrol the ponds in cooperation with other APC members to protect the integrity of the APC itself. For more information, contact William Schwartz, Sanitary Engineer, at (508) 947-0690, ext. 112.

Sampling Results

During the past year, we have taken hundreds of water samples to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

We participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if EPA needs to introduce new regulatory standards to improve drinking water quality. Contact us for more information on this program.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloramines (ppm)	2015	[4]	[4]	1.56	0.74–2.27	No	Water additive used to control microbes
Fluoride (ppm)	2015	4	4	0.81	0.56–1.20	No	Water additive that promotes strong teeth
Haloacetic Acids [HAA] (ppb)	2015	60	NA	23.6	0–38.1	No	By-product of drinking water disinfection
Nitrate (ppm)	2015	10	10	1.57	ND–1.57	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Perchlorate (ppb)	2015	2	NA	0.11	0.10–0.11	No	Inorganic chemicals used as oxidizers in solid propellants for rockets, missiles, fireworks and explosives.
TTHMs [Total Trihalomethanes] (ppb)	2015	80	NA	45.1	30.5–61.1	No	By-product of drinking water disinfection
Total Coliform Bacteria (% positive samples)	2015	5% of monthly samples are positive	6	1	NA	No	Naturally present in the environment
Total Organic Carbon (ppm)	2015	TT	NA	3.3	0.7–5.7	No	Naturally present in the environment

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2014	1.3	1.3	0.05	0/31	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2014	15	0	5	1/31	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2015	200	NA	6	0–63	No	Erosion of natural deposits; Residual from some surface water treatment processes
Color (Units)	2015	15	NA	1	0–6	No	Naturally occurring organic materials
Iron (ppb)	2015	300	NA	12	3–70	No	Leaching from natural deposits; Industrial wastes
Manganese[1] (ppb)	2015	50	NA	10	0–38	No	Leaching from natural deposits

UNREGULATED SUBSTANCES[2]

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2015	4.6	ND–4.6	Disinfectant by-product; Marine micro-algae
Chlorodibromomethane (ppb)	2015	0.6	ND–0.6	Disinfectant by-product; Chemical intermediate
Chloroform (ppb)	2015	12.6	ND–12.6	Disinfectant by-product; Chemical intermediate
Sodium (ppm)	2015	30.3	NA	Erosion of natural deposits; Soil runoff

UNREGULATED CONTAMINANT MONITORING RULE PART 3 (UCMR3)

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
Chlorate (ppb)	2015	730	ND–730
Chromium (ppb)	2015	0.09	ND–0.09
Strontium (ppb)	2015	230	26–230

[1] Manganese is a naturally occurring mineral found in rocks, soil and ground water, and surface water. Manganese is necessary for proper nutrition and is part of a healthy diet, but can have undesirable effects on certain sensitive populations at elevated concentrations. U.S. EPA and MADEP have established public health advisory levels for manganese to protect against concerns of potential neurological effects.

[2] Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist U.S. EPA in determining their occurrence in drinking water and whether future regulation is warranted.

Definitions

90th Percentile: Out of every 10 homes sampled, 9 were at or below this level.

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

LRAA (Locational Running Annual Average): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as LRAAs.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

SMCL (Secondary Maximum Contaminant Level): SMCLs are established to regulate the aesthetics of drinking water like taste and odor.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.